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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/255,052	02/22/1999	ANTOINE BOUCHER	TVW/APP13US	7929
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Saul Ewing, LLP TVWORKS, LLC 1500 MARKET STREET 38th Floor PHILADELPHIA, PA 19102			EXAMINER LONSDERRY, HUNTER B	
			ART UNIT 2421	PAPER NUMBER
			MAIL DATE 10/30/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

09/255,052

Applicant(s)

BOUCHER ET AL.

Examiner

HUNTER B. LONSBERRY

Art Unit

2421

**Period for Reply**  
-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 77-80, 83, 85-89 and 93-102 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 77-80, 83, 85-89, 93-96 and 98-101 is/are rejected.
- 7) ☒ Claim(s) 97 and 102 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/3508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 77-79, 83, 85-87, 89 and 93-96 and 98-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alonso et al (USPN 6,184,878), in view of Debey (USPN 5,701,582), in view of Huizer et al (USPN 6,751,802) and Robinett (US 6,351,471) , all cited by the Examiner.

Regarding claim 77, Alonso discloses a method which provides interactive world wide web access using a set top terminal in a VOD system. Alonso discloses addressable processing equipment (40-1 through 40-n) at a user location (see Fig. 1 and col. 3, lines 11-14 and 42-45), the addressable processing equipment transmitting a request for a presentation is met by the requests for a VOD presentation, WWW

presentation, information page presentation, menu presentation etc. (see col. 4, lines 36-40 and 48-53, col. 3, lines 16-20 and 37-40).

Alonso further discloses a presentation preparation headend server 30 (Fig. 1), including a set top receiver 42 (Fig. 1) coupled to the headend for receiving a request for presentation. Alonso further discloses the headend converts HTML pages received over the Internet into MPEG 2 format (see col. 5, lines 1-12, col. 5, lines 61-66) using a HTML to MPEG compiler.

Although Alonso discloses providing a presentation to the appropriate subscriber (see col. 8, lines 49-53, col. 3, lines 40-45), Alonso does not explicitly disclose the claimed the presentation request including a destination address corresponding to said addressable processing equipment at said user location, nor the presentations including multiple data objects including one constant data rate data object and variable data rate object and MUXing the objects into a data stream.

However, the DeBey reference specifically teaches that when a subscriber request is made and sent to the head end, the head end scheduling and routing computer receives the request and records the subscriber ID or address (see col. 10, lines 42-47). Therefore, it would have been obvious to one of ordinary skill in the art to have modified the Alonso reference to further include the teachings of the Debey reference for the advantages of ensuring that the requested material is transmitted to the appropriate subscriber, eliminating the need for the server to insert a terminal identification parameter, and for comparing ID's at the subscriber terminal resulting in reduced data transmitted over the network and further reducing costs, hardware and software

associated with comparing ID's at the subscriber terminal. In addition to, it is notoriously well known to transmit a subscriber address upstream to a server to ensure the requested material is transmitted to the appropriate subscriber.

Alonso also discloses storing a plurality of web pages from web sites (see col. 6, lines 8- 15) and thus discloses receiving a plurality of selectable presentations at the presentation preparation server. Alonso further discloses the MPEG converted presentation can be stored in video store memory 38 (Fig. 1, col. 5, lines 1-12, col. 6, lines 8-15). Regarding the claimed, "multiplexing said selected presentation in MPEG digital video format with selectable presentations selected by other users into a single MPEG digital video transport stream", Alonso further discloses that computer 32/server 36 serve as a "MPEG packet multiplexer" (see col. 3, lines 42-59 and col. 5, lines 1-12 and 30-33). More specifically, Alonso discloses in col. 3, lines 42-59 that the Bleidt et al patent (US 5,671,377), which is incorporated by reference in its entirety, specifically teaches a digital information server 208 and a data multiplexing circuit 210 for use with a large number of users (see Fig. 2, col. 5, lines 40-49 and col. 6, lines 52-62 of Bleidt et al). Although, Alonso does not explicitly describe "multiplexing...selectable presentations...into an MPEG digital video transport stream", another reference Huizer, teaches that a selected (VOD) television program is transmitted from the server 1 to STB 2 in the form of an MPEG Transport Stream TS (col. 4, lines 1-7). Huizer further discloses that, the transport stream comprises audio packets and video packets. Each packet comprises a header and a payload. The header comprises a Packet Identifier (PID) which identifies whether the packet carries audio data or video data. The

Transport Stream TS may comprise various television programs. A Program Map Table (PMT) is transmitted to indicate which PIDs constitute the relevant program (see col. 4, lines 25-49), and the PID of said control packets is associated with the relevant television program by means of the PMT described above (control packets associated with a different television program have a different PID) (col. 4 lines 59-63).

Furthermore, Huizer discloses that the MPEG systems specification allows the order of packets having different PIDs in a Transport Stream to be changed. This will be the case if the network between server and STB comprises remultiplexers (see col. 5, line 51-col. 6, line 48). If multiple transport streams are combined into a single transport stream and/or remultiplexers are used as disclosed in Huizer, a multiplexer is clearly part of the system. Therefore, Huizer clearly teaches multiplexing a selected presentation (VOD) in MPEG digital video format with selectable presentations selected by other users into an MPEG digital video transport stream, and it would have been obvious to one of ordinary skill in the art to have further combined the Alonso reference with the additional teachings of Huizer, as described above, for the advantage of reducing the amount of bandwidth required for multiple users to access selectable presentations over a transmission network through the use of the MPEG standard.

Alonso further discloses the headend is coupled to the set top via a broadband cable or satellite network (see col. 3, lines 31-35) for transmitting the selected presentation to the addressable subscriber equipment at the user location. It is noted that the set top terminal inherently comprises an MPEG decoder for decoding the received MPEG streams (see col. 4, lines 8-17, col. 3, lines 20-40).

Alonso does not explicitly describe or disclose indicating the position of the selected presentation in the MPEG digital video format in the MPEG video transport stream. However, in analogous art, the Huizer reference, as combined with Alonso above, further teaches receiving a Program Map Table to indicate which PIDs constitute the relevant program, as discussed above, as well as accommodating position labels in the audio and video packets themselves, where the position labels are accommodated in the adaptation field which the MPEG standard provides. In addition, Huizer discloses a VOD system which employs trick plays and teaches problems associated with trick plays in particular, "However, the non-linear playback of MPEG transport streams and program streams from video servers has not received the same level of attention. Non-linear playback involves the interruption and continuation of the stream and is necessary for basically all kinds of trick modes. Trick modes require an accurate control of the stream" (see col. 1, lines 40-46). Huizer further teaches, "In order to allow the receiver to flawlessly resume signal reproduction after a pause, position labels are inserted into the bit stream at positions where the server can resume transmission of the signal after an interruption" (see Abstract). Therefore, it would have been obvious to modify the VOD system of Alonso based on the teachings of Huizer to include the claimed "transmitting an addressable message to said addressable processing equipment at said user location to indicate the position of selected presentation in the MPEG digital video format in said MPEG video transport stream" for the benefit of correctly locating the transport stream packets, as well as enabling a trick play VOD system which flawlessly resumes the signal production.

The combination of Huizer, Alonso and Debey fails to teach the presentations including multiple data objects including one constant data rate data object and variable data rate object and MUXing the objects into a data stream.

Robinett discloses that audio elementary streams in MPEG typically are encoded at a constant bit rate while video is typically encoded at a variable bit rate, these streams are encoded separately and then combined together (MUXed) into a single program stream or transport stream (column 2, lines 11-33). Robinett also discloses it is desirable to remultiplex transport streams for a variety of reasons including adding transport packets containing a first program to a transport stream which carries other programs (column 4, lines 62-column 6, line 6). Null packets may be replaced with program stream data from another program in order to maintain a predetermined bit rate (column 10, lines 26-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Huizer, Alonso and Debey to utilize the remultiplexing, CBR and VBR features as taught by Robinett for the advantages stated above.

As to claim 78, Alonso discloses an MPEG image (see col. 2, lines 33-43) and thus discloses the claimed limitation.

As to claim 79, Alonso discloses transmitting in the MPEG format and thus inherently discloses the claimed "wherein said selected presentation is MPEG digital video format is a group of pictures sequence including a least one MPEG I-frame and



one or more MPEG P- frames forming a video sequence." Further Alonso discloses an MPEG stream which inherently comprises I-frames, P-frames and B-frames.

As to claim 83, the combination of Alonso, DeBey and Huizer discloses the claimed limitation, wherein Alonso, DeBey and Huizer disclose an MPEG transmission system and thus discloses the claimed limitations which are inherent in an MPEG system.

Claims 85-87 and 89 correspond to claims 77-79 and 83.

Regarding claim 93-94, Robinett is relied upon to teach transmitting audio at a constant data rate (column 2, lines 26-27, column 4, lines 48-50).

Regarding claim 95, Robinett discloses receiving VBR data and then transmitting it at its corresponding rate (column 43, lines 45-65).

Regarding claim 96, see claims 93-95.

Regarding claims 98-101 see claims 93-96.

Claims 80 and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Alonso et al (USPN 6,184,878), in view of Debey (USPN 5,701,582), in further view of Huizer et al (USPN 6,751,802) and Robinett (US 6,351,471), as applied to the claims above, and further in view of Hooper et al (USPN 5,422,674), all cited by the Examiner.

As to claims 80 and 88, the combination of Alonso, DeBey, Robinett and Huizer fails to disclose the claimed wherein said selected presentation in MPEG digital video format is an MPEG P-frame forming a data overlay.

However, in related art, the Hooper et al reference teaches the use of MPEG P-frames for overlay images (see col. 7, lines 14-30). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Alonso, DeBey, Robinett and Huizer to include the claimed limitation as taught by Hooper et al for the benefit of having simultaneous display of content while maximizing content space on the display for primary content using MPEG encoded compressed P-frames for image overlays.

#### ***Allowable Subject Matter***

Claims 97 and 101 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNTER B. LONSBERRY whose telephone number is (571)272-7298. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUNTER B. LONSBERRY/  
Primary Examiner  
Art Unit 2421

HBL